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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/417,051	10/13/1999	GEORGE A. DURDEN	BS99-047	6920

38516 7590 01/31/2005
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EXAMINER

BUI, KIEU OANH T

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 01/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/417,051

Applicant(s)

DURDEN ET AL.

Examiner

KIEU-OANH T BUI

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-17 and 22-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-17, 22-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Allowable Subject Matter

1. The indicated allowability of claims 11-17 is withdrawn in view of the newly discovered reference(s) to Freimann (US Patent 6,604,243 B1). Rejections based on the newly cited reference(s) follow.

Remark

2. Claims 1-5, and 18-21 were withdrawn previously due to election/restriction requirement. Pending claims are 6-17, and 22-25.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless --
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.*

4. Claims 6-17 and 22-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Freimann (U.S. Patent No. 6,604,243 B1).

Regarding claim 6, Freiman discloses “a data architecture for storing EIT data in a memory of a set top box” (Fig. 2, and col. 4/lines 50-58), comprising: “a segment data structure into which a segment of EIT data containing information related to one or more events and an

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event instance table pointer corresponding to the segment data structure are stored; an event instance table pointed to by said event instance table pointer corresponding to said segment data structure, comprising: one or more event instance data structure each corresponding to one of said one or more events and each containing an event data structure pointer; and one or more event data structures containing common information for events having same event-related information, wherein each particular event data structure is pointed to by said event data structure pointer stored in those of said one or more event instance data structures that correspond to said events having same event-related information”, i.e., the set top box receives all type of tables including EIT data and event related data and event instance table pointer for linking to other related information data and/or event (Figs. 3-6, col. 2/lines 30-64 for common information can be matching using related criteria based on section maps or EIT tables, and col. 5/lines 1 to col. 6 line 26 for EIT tables and matching process addressed).

As for claim 7, in view of claim 6, Freimann discloses “comprising an event-related data table, comprising: event-related data associated with said events having same event-related information event; and a pointer to said event detailed structure associated with said events having same event-related information” (Fig. 6 and the correlation of EIT tables using pointers for information and detailed structure associated with events having same related events, see col. 7/line 43 to col. 8/line 54 as related information can be found by matching criteria, see more on col. 2/lines 40-64 for matching related information data and events).

As for claim 8, in view of claim 6, Freimann inherently discloses “wherein said segment data structure has a length of 10 bytes or less” (col. 5/lines 32-45 as a NIT table or EIT table can be divided into 256 sections from 1024 bytes, which is less than 10 bytes per segment data structure, and a section is from 8 bytes to 12 bytes).

As for claim 9, in view of claim 6, Freimann inherently discloses “wherein, said event instance data structure has a length of 12 bytes or less” (col. 5/lines 32-45 as a NIT table or EIT can be divided into 256 sections from 1024 bytes or up to 4096 bytes, which is about 12 bytes per event instance data structure or less).

As for claim 10, in view of claim 6, Freimann inherently teaches “wherein said event data structure has a fixed portion having a length of 12 bytes or less and a variable portion having an average length of approximately 70 bytes”, i.e., table may have any size up to 4096 bytes, a fixed portion can be 12 bytes or less for a section header and then some reserve fields for information data, see col. 5/lines 27-45, Figs. 5 & 6, and col. 7/lines 16-42 for area 416).

Regarding claim 11, Freimann discloses “a method for storing EIT data in a set top box, comprising the steps of: (a) receiving a segment of EIT data; (b) storing said segment; (c) creating an event instance data structure associated with a particular event in said segment; (d) extracting event-related data pertaining to said particular event; (e) comparing the extracted event-related data to event-related data previously stored in an event-related data table; (f) obtaining an event data structure pointer to detailed data associated with said particular event from said event-related data table if a match occurs in step (e); (g) storing said event data structure pointer in said event instance data structure; and (h) storing said event instance data structure in an event instance table”, i.e., the set top box receives all type of tables including EIT

data and event related data and event instance table pointer for linking to other related information data and/or event (Figs. 3-6, col. 2/lines 30-64 for common information can be matching using related criteria based on section maps or EIT tables, and col. 5/lines 1 to col. 6 line 26 for EIT tables and matching process including storing the EIT data and related information data in EIT table addressed).

As for claims 12-17, in view of claim 11, Freimann discloses “wherein step (b) comprises the steps of: (i) creating a segment data table; (ii) storing said segment in said segment data table; and (iii) storing an event instance data pointer pointing to said event instance data table in association with said segment” and the creating of an event data structure and pointers as well as the comparison and determining the matching events and event-related data with the repeating process using computer routines and the step of storing the extracted event-related data and the event data pointer created in the event-related data table (col. 2/line 15-col. 3/line 15 & col. 4/lines 15-58, col. 5/line 9-37, and Figs 2-6, 7-8, 10-11 for related drawings and description of software filtering process and matching criteria for EIT tables, which constantly updating and storing in the EIT tables for an updated version of section map).

Regarding claim 22, Freimann discloses “a set top box comprising: a receiver to receiver EIT data and format said EIT data into formatted EIT data; a processor to process said formatted EIT data; and a memory having a data architecture in which the processed EIT data is stored so as to significantly reduce inherent redundancy of the EIT data” (Fig. 2 for the set top box 110, a front end 220 for receiving EIT data –as illustrated in Fig. 1--; a microprocessor 202 to process EIT data and a memory 214 or flash 206 for storing EIT data, as stated in col. 4/lines 50-58).

As for claim 23, in view of claim 22, Freiman discloses “wherein said processor determines which data is common to events in said EIT data and stores that common data in a single data structure accessible by each of said events”, i.e., processor has a PES filter 204 for filtering out and determines which one is common to events within the EIT data (col. 4/lines 15-col. 5/line 32 and the processor stores within the data structure accessible by each of the events (as discussed earlier in claims 6-10).

As for claims 24 and 25, in view of claim 22, Freiman teaches “wherein said EIT data is reordered by time prior to being sent to the set top box” and “wherein said processor reorders the formatted EIT data by time”, i.e., EIT tables being sent by the cable or satellite system at the time before, and the update for program, events or services, if any, is referred as reordering at the time obviously before the updated EIT data being sent to the set top box, and the reorder process is performed by time, i.e., at any time and date for current program or services from the service provider (see col. 1/line 10-col. 2/line 5).

Conclusion

5. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9306, (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista Kieu-Oanh Bui whose telephone number is (703) 305-0095. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:30 PM, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant, can be reached on (703) 305-4755.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

A handwritten signature in black ink, appearing to read 'Krista Bui', with a long, sweeping horizontal line extending to the right.

KRISTA BUI
PATENT EXAMINER

Krista Bui
Art Unit 2611
January 20, 2005